

## **REMARKS**

In the Official Action mailed on **23 July 2010**, the Examiner reviewed claims 1-33. Examiner rejected claims 1-9 under 35 U.S.C. § 112. Examiner rejected claims 1, 7-8, 10, 17-21, 26-31, and 33 under 35 U.S.C. § 103(a) based on Kim (U.S. Patent No. 6,594,363, hereinafter “Kim”). Examiner rejected claims 2-4 under 35 U.S.C. § 103(a) based on Kim and Levine (U.S. Patent No. 6,356,084, hereinafter “Levine”). Examiner rejected claim 5 under 35 U.S.C. § 103(a) based on Kim and Arndt et al. (U.S. Patent No. 6,421,448, hereinafter “Arndt”). Examiner rejected claim 6 under 35 U.S.C. § 103(a) based on Kim and Papadopoulos et al. (U.S. Patent No. 6,128,384, hereinafter “Papadopoulos”). Examiner rejected claims 9 and 22 under 35 U.S.C. § 103(a) based on Kim and Chiu et al. (U.S. Patent No. 6,882,577, hereinafter “Chiu”). Examiner rejected claims 11-12, 23-25, and 32 under 35 U.S.C. § 103(a) based on Kim and applicants admitted prior art (hereinafter “AAPA”). Examiner rejected claim 13 under 35 U.S.C. § 103(a) based on Kim, AAPA, and Levine (U.S. Patent No. 6,356,084, hereinafter “Levine”). Examiner rejected claims 14-16 under 35 U.S.C. § 103(a) based on Kim, AAPA, and Southworth et al. (U.S. Patent No. 3,950,607, hereinafter “Southworth”).

### **Examiner Interview**

In a phone conversation on 16 September 2010, Examiner and Applicant discussed the independent claims in the instant application in light of the cited prior art. Specifically, Applicant and Examiner discussed the Kim prior art as it was applied against the independent claims. Applicant pointed out that the Kim prior art nowhere disclosed a microphone that transmitted data about the microphone to a system. Examiner generally agreed about the content of the Kim prior art, but indicated that the claims could be read sufficiently broadly to read

on the Kim prior art. Examiner suggested clarifying the term “data” in the claims to avoid the Kim prior art reading on the claimed embodiments.

In addition to the amendments to the independent claims described below, Applicant has amended the independent claims to clarify the nature of the data that can be transmitted from the microphone in the claimed embodiments. Specifically, Applicant has amended these claims to clarify that **the data identifies a type of the microphone**. These amendments find support in the instant application as follows:

Another embodiment of the invention is a microphone with a plurality of electrical contacts for interfacing with an external device, such as an interface unit. The microphone contains a circuit that is connected to at least one electrical contact. The electrical contact provides the external device with data that identifies at least one of the following: the microphone manufacturer, the microphone manufacture date, the microphone model number, the microphone serial number, the microphone frequency response, whether the microphone uses phantom power, the desired pre-amplifier gain, and the microphone dynamic response (see instant application, pages 3-4), and

The value of the analog electrical device(s) could be utilized to identify the microphone. For example, a resistor value of 10K ohms could be utilized to identify a first microphone type, a resistor value of 20K ohms could be utilized to identify a second microphone type, and a resistor value of 50K ohms could be utilized to identify a third microphone type (see instant application, page 8).

Because Kim nowhere describes a microphone that transmits data that identifies the microphone type, Kim cannot render the claimed embodiments obvious (see Manual of Patent Examining Procedure (MPEP) §§ 2141(III) and 2143.01(IV-VI)). For this reason, Applicant respectfully requests the withdrawal of the rejection under 35 U.S.C. § 103 based on Kim.

### Rejections under 35 U.S.C. § 112

Examiner rejected claims 1-9 under 35 U.S.C. § 112, second paragraph. Specifically, Examiner avers that a microphone is a diaphragm, and so it is not clear how the microphone includes a circuit which transmit data bout the microphone to an external device.

Applicant respectfully points out to Examiner that FIG. 1 illustrates an enclosure for a microphone, and that lines 13-16 of page 5 clearly states that FIGs. 5-6 present a circuit **within the microphone of FIG. 1**. Moreover, Section 5.1.3 of the instant application states that

“as shown in **Figure 6**, a self-identifying microphone **contains digital circuitry that identifies the microphone**. For example, the self-identifying microphone may include a serial-electrically-erasable-read-only-memory (“SEEPROM”) 125 that stores data indicating the microphone’s manufacturer and model number, *i.e.*, **[indicating] the microphone’s type**. Referring to Figure 6, pin 130 may be connected to the digital ground pin and the three address pins (A0, A1, and A2) of SEEPROM 125” (see instant application at page 8, emphasis added).

Thus, Applicant respectfully points out that Figure 1 illustrates a microphone enclosure, and that Figure 6 discloses circuitry that is included in the microphone enclosure illustrated in Figure 1, such that the circuitry stores and transmits data about the microphone.

Accordingly, Applicant has amended independent claim 1 to clarify that the microphone includes a microphone enclosure, and that the circuitry is within the microphone enclosure. These amendments find support in Figures 1 and 6, and pages 5 and 8 of the instant application. No new matter has been added.

### Rejections under 35 U.S.C. § 103(a)

Examiner rejected claims 1, 7-8, 10, 17-21, 26-31 and 33 under 35 U.S.C. § 103(a) based on Kim. Applicant respectfully disagrees with Examiner’s rejection. Kim does not disclose a microphone that includes a circuit **within the**

**microphone enclosure** which transmits **data** about the microphone to an external device.

Specifically, in the Office Action, Examiner states that Kim discloses “a microphone connected to at least one electrical contact which transmits data about the microphone to the external device through the at least one electrical contact” (see Office Action at pages 3-4). However, Applicant respectfully notes that Examiner’s rejection does not properly address the limitations of the claimed invention. The claimed invention is directed to a microphone that **includes a circuit which transmits data** about the microphone to the external device through the at least one electrical contact.

Moreover, Examiner’s rejection cites Kim at FIGs. 1 and 3, and col. 5, line 62 – col. 6, line 9. However, Applicant respectfully notes that the cited sections of Kim merely disclose:

“**microphone detector 33** comprises resistances R1 and R2, and a PNP-type transistor Q1” (see Kim at col. 5, lines 62 – 63); and

“if the microphone 16 **is not connected** thereto, the microphone detector 33 outputs a high level signal” (see Kim at col. 6, lines 7-9).

Thus, Kim merely discloses that “the invention has a microphone detector capable of detecting whether or not a microphone is **connected**” (see Kim at col. 6, lines 7-9). Applicant respectfully points out that a microphone detector which determines whether a microphone is connected is not the same as a circuit within a microphone which transmits data about the microphone to an external device.

In the Office Action, Examiner also stated, and Applicant agrees, that Kim does not disclose a circuit within the microphone (see Office Action at page 4). Moreover, in rejecting the independent claims, Examiner stated that it would have been a designer’s preference to attach the microphone detector of Kim directly to the microphone for the purpose of making the system dynamic and cost effective (see Office Action at page 4).

However, Applicant respectfully points out to Examiner that nowhere does Kim disclose that the microphone detector transmits **data** about a microphone to an external device. Moreover, Applicant respectfully reminds Examiner that a proposed modification cannot render a cited reference unsatisfactory for its intended purpose (see MPEP § 2143.01 (V)). Specifically, the microphone detector of Kim merely detects “whether or not a microphone is **connected**” (see Kim at col. 5, lines 2-3), and thus attaching the microphone detector directly to the microphone would render the microphone detector inoperable for its intended purpose because it would never determine the microphone to be disconnected from the microphone detector.

In contrast, the disclosed embodiments of the present invention provide a self-identifying microphone which includes a circuit that **transmits data about itself** to an external device through at least one electrical contact (i.e., transmits data that indicates the microphone’s type). See instant application, pages 7-8, and page 14, lines 9-10.

Therefore, Applicant respectfully submits that Kim does not disclose “**a circuit within the microphone enclosure**, connected to at least one electrical contact, which **transmits data about the microphone** to the external device through the at least one electrical contact.”

Accordingly, Applicant has amended independent claim 1 to clarify that the microphone includes a microphone **enclosure**, and that the circuitry is **within the microphone enclosure**. These amendments find support in Figures 1 and 6, and pages 5 and 8 of the instant application. No new matter has been added.

Hence, Applicant respectfully submits that independent claims 1, 10, 19, 23, and 26 are in condition for allowance. Applicant also submits that claims 2-9, which depend upon claim 1, claims 11-18, which depend upon claim 10, claims 20-22, which depend upon claim 19, claim 24-25, which depend upon claim 23, and claims 27-33 which depend upon claim 26, are for the same reasons in

condition for allowance and for reasons of the unique combinations recited in such claims.

### CONCLUSION

It is submitted that the application is presently in form for allowance.  
Such action is respectfully requested.

Respectfully submitted,

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